Practical 1

Aim:(i) Create tables according to the following definition

TABLE 1: Salespeople

Code :

```
create table Salespeople (Snum number(10), sname varchar(50), city varchar(50), comm decimal(20,20))

desc Salespeople

insert into Salespeople values(1001,'Peel','London',0.12)

insert into Salespeople values(1002,'Serres','San jose',0.13)

insert into Salespeople values(1003,'Axelord','New York',0.10)

insert into Salespeople values(1004,'Motika','London',0.11)

insert into Salespeople values(1005,'Rifkin','Barcelona',0.15)

select *from Salespeople
```

Output:

SNUM	SNAME	CITY	COMM
1001	Peel	London	.12
1002	Serres	San jose	.13
1003	Axelord	New York	.1
1004	Motika	London	.11
1005	Rifkin	Barcelona	.15

5 rows returned in 0.00 seconds CSV Export

TABLE 2: Customer

Code :

```
create table Customer(Cnum number(10), Cname varchar(50), City varchar(50), Raking number(10), Snum number(10))

desc Customer1

insert into Customer values(2001,'Hoffman','London',100,1001)

insert into Customer values(2002,'Giovamne','Rome',200,1003)

insert into Customer values(2003,'Liu','San jose',300,1002)

insert into Customer values(2004,'Grass','Berlin',100,1002)

insert into Customer values(2006,'Clemens','London',300,1007)

insert into Customer(Cnum, Cname, Raking, Snum) values(2007,'Pereria',100,1004)
```

select *from Customer

Output:

CNUM	CNAME	CITY	RAKING	SNUM
2001	Hoffman	London	100	1001
2002	Giovamne	Rome	200	1003
2003	Liu	San jose	300	1002
2004	Grass	Berlin	100	1002
2006	Clemens	London	300	1007
2007	Pereria	-	100	1004

6 rows returned in 0.00 seconds CSV Export

TABLE 3: Orders

Code :

create table Order(Onum number(10), Amount number(4,2), Odate date, Cnum number(10), Snum number(10))

desc Order

insert into Order values(3001,18.96,'10-MAR-2008',2002,1002)

insert into Order values(null,null,null,null,null)

insert into Order values(null,null,null,null,null)

select *from Order

Output :

ONUM	AMOUNT	ODATE	CNUM	SNUM
3001	18.96	10-MAR-08	2002	1002
-	-	-	-	-
-	-	-	-	-

3 rows returned in 0.00 seconds CSV Export

- **Based on the given table perform following queries:**
  1. **Display snum, sname, city and comm. Of all salespeople.**

     Query : select *from Salespeople

     Output:

SNUM	SNAME	CITY	COMM
1001	Peel	London	.12
1002	Serres	San jose	.13
1003	Axelord	New York	.1
1004	Motika	London	.11
1005	Rifkin	Barcelona	.15

5 rows returned in 0.00 seconds CSV Export

2. **Display all snum without duplicates from all orders.**

Query: select distinct Snum from Order4

Output:

SNUM
-
1002

2 rows returned in 0.00 seconds

3. **Display names and commissions of all salespeople from London.**

Query: select sname, comm from Salespeople where city = 'London'

Output:

SNAME	COMM
Peel	.12
Motika	.11

2 rows returned in 0.00 seconds

4. **All customers with a rating of 100.**

Query : select *from Customer1 where Raking = 100

Output:

CNUM	CNAME	CITY	RAKING	SNUM
2001	Hoffman	London	100	1001
2004	Grass	Berlin	100	1002
2007	Pereria	-	100	1004

3 rows returned in 0.00 seconds CSV Export

5. **Produce order no, amount and date for all rows in the order table.**

Query: select Onum, Amount, Odate from Order4

Output:

ONUM	AMOUNT	ODATE
3001	18.96	10-MAR-08
-	-	-
-	-	-

3 rows returned in 0.00 seconds

6. **All customers who were either located in San Jose or had a rating above $200.**

Query: select *from Customer1 where Raking>200 or city = 'San jose'

Output :

CNUM	CNAME	CITY	RAKING	SNUM
2003	Liu	San jose	300	1002
2006	Clemens	London	300	1007

2 rows returned in 0.00 seconds CSV Export

7. **All customers in San Jose, who have a rating > 200.**

   Query : select *from Customer1 where Raking>200 and city = 'San jose'

   Output:

CNUM	CNAME	CITY	RAKING	SNUM
2003	Liu	San jose	300	1002

1 rows returned in 0.00 seconds CSV Export

8. **All orders for more than $1000.**

   Query: select *from Order4 where Amount>1000

   Output:

Results Explain Describe Saved SQL History

no data found

9. **Names and cities of all salespeople in London with a commission above 0.10.**

   Query: select sname, city from Salespeople where comm>0.10

   Output:

SNAME	CITY
Peel	London
Serres	San jose
Motika	London
Rifkin	Barcelona

4 rows returned in 0.01 seconds CSV Export

10. **All customers excluding those with rating <= 100 unless they are located in Rome.**

    Query: select *from Customer1 where Raking>100 or city = 'Rome'

    Output:

CNUM	CNAME	CITY	RAKING	SNUM
2002	Giovamne	Rome	200	1003
2003	Liu	San jose	300	1002
2006	Clemens	London	300	1007

3 rows returned in 0.00 seconds CSV Export

11. **All salespeople either in Barcelona or in London.**

    Query: select *from Salespeople where city in('Barcelona' ,'London')

    Output:

SNUM	SNAME	CITY	COMM
1001	Peel	London	.12
1004	Motika	London	.11
1005	Rifkin	Barcelona	.15

3 rows returned in 0.01 seconds CSV Export

12. All customers without a city.

Query: select *from Customer1 where city is null

Output:

CNUM	CNAME	CITY	RAKING	SNUM
2007	Pereria	-	100	1004

1 rows returned in 0.00 seconds CSV Export

13. All orders taken on oct. 3rd or 4th 1994.

Query: select *from Order4 where Odate between '03-OCT-1994' and '04-OCT-1994'

Output:

Results Explain Describ

no data found

ii)Write the following simple SQL Queries on the University Dataset:

1. **Find the names of all the students whose total credits are greater than 100**

Query: select name from student where total credits > 100

2.Find the course id and grades of all courses taken by any student named 'Tanaka'

Query: select id, grades from courses where student = ‘Tanaka’

3.Find the ID and name of instructors who have taught a course in the Comp. Sci. department, even if they are themselves not from the Comp. Sci. department. To test this query, make sure you add appropriate data and include the corresponding insert statements along with your query.

Query: select id , name from course where department = ‘Computer Science Department’

4.Find the courses which are offered in both 'Fall' and 'Spring' semester (not necessarily in the same year).

Query: select courses from record where semester = ‘Fall’ and semester = ‘Spring’

CONCLUSION: In this practical I learned about creating tables using SQL commands and select query.

Staff Signature:

Grade:

Remarks by the Staff: